

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): ~~Electrically~~ An electrically controllable device ~~having~~ with variable optical/energy properties in transmission or in reflection, ~~characterized in that it is made as~~ comprising a single self-supporting film, the said film being formed from a polymerized blend of at least a first element suitable for providing a blend with an electrochromic functionality and at least a second element suitable for providing an electrolyte functionality for transporting ionic charges within the said blend.

Claim 2 (Currently Amended): ~~Device~~ The device according to Claim 1, ~~characterized in that~~ wherein the blend constitutes a single matrix that is obtained by simultaneous polymerization of the first and second elements.

Claim 3 (Currently Amended): ~~Device~~ The device according to Claim 1, ~~characterized in that~~ wherein the blend constitutes a single matrix that is obtained by successive polymerization of the first and second elements.

Claim 4 (Currently Amended): ~~Device~~ The device according to ~~either of Claims 1 and 2,~~ Claim 1, ~~characterized in that~~ wherein the first element is a conductive polymer.

Claim 5 (Currently Amended): ~~Device~~ The device according to Claim 4, ~~characterized in that~~ wherein the first element is a polymer based on a 3,4-alkylene dioxythiophene or one of its derivatives.

Claim 6 (Currently Amended): ~~Device~~ The device according to Claim 4,
~~characterized in that~~ wherein the first element is a polymer based on carbazole or one of its
derivatives.

Claim 7 (Currently Amended): ~~Device~~ The device according to Claim 1,
~~characterized in that~~ wherein the first element is a blend of at least two electrochromic
materials, at least one having an anodic coloration, the other having a cathodic coloration.

Claim 8 (Currently Amended): ~~Device~~ The device according to Claim 7,
~~characterized in that~~ wherein the material having a cathodic coloration is a bipyridine salt.

Claim 9 (Currently Amended): ~~Device~~ The device according to Claim 7,
~~characterized in that~~ wherein the material having an anodic coloration is based on 5,10-
phenazine or one of its derivatives.

Claim 10 (Currently Amended): ~~Device~~ The device according to ~~one of Claims 1 to~~
~~3, characterized in that~~ Claim 1, wherein the second element is a polymer chosen from
polyoxyalkylenes.

Claim 11 (Currently Amended): ~~Device~~ The device according to Claim 10,
~~characterized in that~~ wherein the second element is chosen from polyoxyethylenes or one of
its derivatives.

Claim 12 (Currently Amended): ~~Device~~ The device according to ~~either of Claims 10 and 11, characterized in that~~ Claim 10, wherein the second element is based on difunctional poly(ethylene glycol) or one of its derivatives.

Claim 13 (Currently Amended): ~~Device~~ The device according to ~~one of Claims 1 to 12, characterized in that~~ Claim 1, wherein the self-supporting film includes at least one third element suitable for improving its mechanical integrity or for improving the ionic conductivity.

Claim 14 (Currently Amended): ~~Device~~ The device according to Claim 13, ~~characterized in that~~ wherein the third element is a polymer ~~chosen especially~~ selected from the group consisting of polyacrylates, polymethacrylates, polycarbonates, polyacetates, polyurethanes, cellulose, ~~etc~~ and mixtures thereof.

Claim 15 (Currently Amended): ~~Device~~ The device according to ~~either of Claims 13 and 14, characterized in that~~ to Claim 13, wherein the third element is based on diethylene glycol diallyl carbonate or one of its derivatives, or else poly(ethylene glycol) methyl ether methacrylate.

Claim 16 (Currently Amended): ~~Device~~ The device according to ~~any one of Claims 1 to 15, characterized in that~~ Claim 1, wherein the film constitutes an interpenetrating network.

Claim 17 (Currently Amended): ~~Device~~ The device according to ~~any one of Claims 1 to 15, characterized in that~~ Claim 1, wherein the film constitutes a semi-interpenetrating network.

Claim 18 (Currently Amended): ~~Device~~ The device according to ~~one of Claims 1 to 16, characterized in that it~~ Claim 1, wherein the device has a gradient in the composition of the first element along a characteristic dimension of the film.

Claim 19 (Currently Amended): ~~System incorporating~~ A system comprising at least one device according to ~~any one of the preceding claims, characterized in that it furthermore includes~~ Claim 1, wherein the system further comprises at least one carrier substrate, wherein the said device ~~being~~ is placed between ~~two current leads, namely the~~ a lower current lead and the an upper current lead respectively (“lower” corresponding to the current wherein the lower current lead is closest to the carrier substrate, ~~as opposed to the “upper” lead which and~~ the upper current lead is furthest from the said carrier substrate[[]]).

Claim 20 (Currently Amended): ~~System~~ The system according to Claim 19, ~~characterized in that it~~ wherein the system is an electrochromic or viologen-based system.

Claim 21 (Currently Amended): ~~System~~ The system according to ~~either of Claims 19 and 20, characterized in that it~~ Claim 19, wherein the system constitutes a vehicle sunroof, that can be autonomously actuated, or a vehicle side window or rear window, or a rearview mirror.

Claim 22 (Currently Amended): ~~System~~ The system according to ~~either of Claims 19 or 20, characterized in that it~~ Claim 19, wherein the system constitutes a windscreen or a portion of a windscreen.

Claim 23 (Currently Amended): ~~System~~ The system according to ~~either of Claims 19 and 20, characterized in that it~~ Claim 19, wherein the system constitutes a graphical and/or alphanumeric data display panel, glazing for buildings, a rearview mirror, an aircraft windshield or cabin window, or a roof window.

Claim 24 (Currently Amended): ~~System~~ The system according to ~~either of Claims 19 and 20, characterized in that it~~ Claim 19, wherein the system constitutes:

- interior or exterior glazing for buildings;
- a shop showcase or countertop display case, which may be curved;
- glazing for protecting an object of the painting type;
- an antiglare computer screen;
- glass furniture;
- a wall separating two rooms inside a building or two compartments in a motor vehicle.

Claim 25 (Currently Amended): ~~System~~ The system according to ~~any one of Claims 19 to 24, characterized in that it~~ Claim 19, wherein the system operates in transmission or in reflection.

Claim 26 (Currently Amended): ~~System~~ The system according to ~~one of Claims 19 to 25, characterized in that~~ Claim 19, wherein the substrate is transparent, flat or curved, clear or bulk-tinted, and of polygonal shape or at least partly curved.

Claim 27 (Currently Amended): ~~System~~ The system according to ~~one of Claims 19 to 26, characterized in that~~ Claim 19, wherein the substrate is opaque or opacified.

Claim 28 (Currently Amended): ~~System~~ The system according to ~~one of Claims 19 to 27, characterized in that it~~ Claim 19, wherein the system incorporates another functionality.

Claim 29 (Currently Amended): ~~Process~~ A process for ~~obtaining a~~ producing the device according to ~~any one of Claims 1 to 18, characterized in that~~ Claim 1, wherein:

- optionally, the second element is blended with the third element in the presence of a polymerization initiator;
- the polymerization of the second element is carried out by thermal activation of the blend, and the thermal activation of the blend is continued until the third element has polymerized; and
- the second and third elements are polymerized or copolymerized in a step by thermal activation of the blend.

Claim 30 (Currently Amended): ~~Obtaining~~ The process according to Claim 29, ~~characterized in that~~ wherein:

- the first element is added to the blend of the second and third elements;
- the first element is polymerized, by immersion of the blend, with the aid of a polymerization initiator; and
- the blend is rinsed.

Claim 31 (Currently Amended): ~~Process~~ The process according to Claim 29, ~~characterized in that~~ wherein:

- the polymerized blend of the second and third elements is brought into contact in a bath based on the first element;

- the first element is polymerized, by immersion of the blend, with the aid of a polymerization initiator; and
- the blend is rinsed.

Claim 32 (Currently Amended): ~~Process~~ The process according to ~~one of Claims 29 to 31, characterized in that~~ Claim 29, wherein the film is impregnated with an Li⁺ salt, or one based on another cation, and optionally with a plasticizer.

Claim 33 (Currently Amended): ~~Process~~ The process according to ~~one of Claims 29 to 31, characterized in that~~ Claim 29, wherein the impregnation of the film is carried out during the film production steps, by incorporating a charge provider into the blend of monomers of the three elements.